

Claims

1 1. An access network controller, comprising:

2 a processor;

3 communication circuitry within the access network
4 controller;

5 a memory for storing computer instructions that
6 define operational logic relating to a response of the
7 access network controller to a received pseudo-page
8 signal; and

9 a network port for enabling the access network
10 controller to communicate with external systems.

11 2. The access network controller of claim 1 wherein the
12 memory further includes computer instructions that define
13 profile information for at least one hybrid mobile station.

14 3. The access network controller of claim 2 wherein the
15 computer instructions that define profile information specify
16 that the access network controller is to generate a response
17 to a base station to advise it that the HMS is unavailable.

18 4. The access network controller of claim 2 wherein the
19 computer instructions that define profile information specify
20 that the access network controller is to generate a response
21 to a base station to advise it that the HMS has been paged and
22 is being redirected to receive pages from the voice network.

23 5. The access network controller of claim 2 wherein the
24 computer instructions that define profile information specify
25 that the access network controller is to generate a response
26 to a base station to advise it that the HMS is present but not
27 available for a voice call.

1 7. The access network controller of claim 1 wherein the
2 memory further includes computer instructions that define
3 operational logic for forwarding a voice call to an Internet
4 Call-Waiting Server.

1 8. A method in a communication network, comprising:
2 receiving a pseudo-page signal transmitted by a base
3 station in a specified interface signal between the base
4 station and an access network controller; and
5 generating a corresponding response.

1 9. The method of claim 8 wherein the corresponding
2 response includes commanding a hybrid mobile station to
3 redirect and to suspend a data call so that it may receive and
4 respond to paging signals transmitted by a base station.

1 10. The method of claim 9 wherein the response includes
2 waiting long enough to enable the hybrid mobile station to
3 switch from the data network to the voice network and then
4 advising the base station that the hybrid mobile station is
5 presently available.

1 11. The method of claim 8 wherein the response includes
2 forwarding the voice call to an Internet Call-Waiting Server.

1 12. The method of claim 8 wherein the response includes
2 advising the base station that the hybrid mobile station is
3 not present.

1 13. The method of claim 8 wherein the response includes
2 advising the base station that the hybrid mobile station is
3 present but not available.

1 14. The method of claim 8 wherein the response includes
2 advising the base station that the hybrid mobile station is
3 present and available.

1 15. A method in a base station for routing or setting up
2 a call, comprising:
3 examining a permanent ID of a mobile station for
4 which a voice call is to be set up; and
5 determining whether the mobile station is a hybrid
6 mobile station.

1 16. The method of claim 15 further including the step of
2 generating a pseudo-page that is to be transmitted to an
3 access network controller.

1 17. The method of claim 15 further including the step
2 of, if the mobile station is a hybrid mobile station,
3 forwarding the call to an Internet Call Delivery Server.

1 18. The method of claim 15 further including the step
2 of, if the mobile station is a hybrid mobile station,
3 forwarding the call to an Internet Call-Waiting Server.

1 19. The method of claim 15 further including the step of
2 receiving a response to a previously transmitted pseudo-page
3 and communicating with a mobile switching center to forward
4 the call to voice mail.

1 20. The method of claim 15 further including the step of
2 receiving a response to a previously transmitted pseudo-page
3 and communicating with a mobile switching center to advise it
4 that the hybrid mobile station is not present.